Title V

Model General Permit Template

SERIES 7 Tanks

Template # SJV-TK-7-0

fixed roof tank with vapor recovery system

tank <u>not</u> used at a drilling and production facility prior to custody transfer

storage capacity greater than or equal to 40 m^3 (10,567 gallons)

construction, modification, or reconstruction commenced after July 23, 1984

true vapor pressure greater than 1.5 psia

This template is designed to streamline the Title V permitting process for tanks meeting the above qualifications. Applicants for Title V permits choosing to use this template will only have to complete the enclosed template qualification form and submit it with their Title V application.

San Joaquin Valley Unified Air Pollution Control District

Final
Title V Model General Permit Template
Series 7 Tanks

Template No: SJV-TK-7-0

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SAN JOAQUIN VALLEY
UNIFIED AIR POLLUTION CONTROL DISTRICT

TITLE V GENERAL PERMIT TEMPLATE SJV-TK-7-0

ENGINEERING EVALUATION

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Template SJV-TK-7-0

I. Purpose

The purpose of the proposed template is to streamline the Title V permitting process and reduce the time required by the applicant and the District by identifying the federally applicable requirements for tanks and establishing permit conditions which will ensure compliance with such requirements. These conditions will be incorporated into the Title V permit of any facility choosing to make use of the template.

II. Template Applicability

The template applies to any fixed roof tank which:

Has a closed vent system and control device, and

Commenced construction, modification, or reconstruction after July 23, 1984, and

Stores a volatile organic liquid which has a true vapor pressure greater than 1.5 psia, and

Has a storage capacity greater than or equal to 40 m^3 (10,567 gallons).

The applicability of this template is determined by completion of the Template Qualification Form (TQF) attached as Appendix C. The completed and signed TQF for each qualifying unit must be submitted with the Title V application.

III. Applicable Requirements

Units may be subject to "federally enforceable" requirements as well as requirements that are enforceable by the "District-only". Federally enforceable requirements will be enforceable by the EPA, the District, and the public through Title V permit conditions identified as federally enforceable. District-only requirements represent local or state regulations for which the EPA has no direct enforcement authority. The final Title V permits issued by the District will contain both federally enforceable and District-only requirements.

District-only requirements are not addressed in this template except for those used in streamlining of multiple requirements. District-only requirements used in streamlining of multiple requirements will become federally enforceable. Table 1, Applicable Requirements, does not necessarily include all federally enforceable requirements that apply to tanks qualifying to use this template, and it is the

source's responsibility to determine any and all applicable requirements to which the source is subject. Generally, requirements not addressed by this template are those that require a source-specific analysis, or are covered by other templates.

Table 1 Applicable Requirements

Rule Category	Rule/Regulation	Citation	Description
A	SJVUAPCD Reg. IV	4623	Storage of Organic Liquids
A	NSPS Subpart Kb	40 CFR 60 60.110b	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification commenced after July 23, 1984
A	SJVUAPCD Reg. II	2520, 9.5.2	Federally Mandated Operating Permits
B	SJVUAPCD Reg. II	2201	New Source Review Rule
B	SJVUAPCD Reg. II	2520	Federally Mandated Operating Permits
B	SJVUAPCD Reg. IV	4101	Visible Emissions
B	NESHAP, Subpart CC	40 CFR 63	Petroleum Refineries
B	NESHAP, Subpart F	40 CFR 63	Synthetic Organic Chemical Manufacturing Industry
B	NESHAP, Subpart I	40 CFR 63	Certain Processes Subject to the Negotiated Regulation for Equipment Leaks
C	SJVUAPCD Reg. IV	4661	Organic Solvents
C	SJVUAPCD Reg. IV	4801	Sulfur Compounds
C	NSPS Subpart K	40 CFR 60 60.110	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
C	NSPS Subpart Ka	40 CFR 60 60.110a	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 , and Prior to July 23, 1984

Category "A" rules contain requirements that are directly applicable to the qualifying units; compliance with these applicable requirements will be demonstrated in this engineering evaluation and assured by the template permit conditions. In section IV, Compliance, the federally-enforceable requirements from category "A" rules are listed with a discussion of how compliance with these requirements is achieved.

Category "B" rules contain federally enforceable requirements that were not addressed in this template. These may not be all of the federally enforceable requirements for this unit. Requirements from these rules must be addressed by the applicant outside of this template within the Title V application Compliance Plan form (TVFORM-004). Category "B" listing is included in this table as an informational item to assist applicants in this effort.

Category "C" rules contain requirements which have been determined not to be applicable to qualifying units. A permit shield is proposed for the category "C" rules. An explanation of the determination of non-applicability of category "C" rules is included in the permit shield section of this evaluation.

IV. Compliance

This section contains a discussion of how compliance is assured with each requirement addressed in this template.

40 CFR 60, Subpart Kb
Section 60.112b requires that any storage vessel that either:

> Stores a volatile organic liquid which has a true vapor pressure of greater than or equal to 5.2 kPa (0.75 psia) for tanks with a storage capacity greater than or equal to 151 m^3 (39,890 gallons), or
>
> Stores a volatile organic liquid which has a true vapor pressure of greater than or equal to 27.6 kPa (4.0 psia) for tanks with a storage capacity greater than or equal to 75 m^3 (19,813 gallons) but less 151 m^3 (39,890 gallons)

be equipped with either a floating roof, a closed vent system and control device, or its equivalent. Tanks covered by this template are required to be equipped with a closed vent system and control device capable of collecting all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. The control device shall be designed and operated to prevent the emission of VOC to the atmosphere with an efficiency of at least 95%. Template permit conditions will be added to require that tanks covered by this template are equipped with a closed vent system and control device meeting these requirements. Template permit conditions will also be added for associated testing, monitoring and recordkeeping requirements. See template permit conditions #2-12.

Section 60.113b describes start up conditions consisting of an operating plan demonstrating that the control device used will prevent the emission of VOC to the atmosphere with an efficiency of at least 95%. This requirement and associated recordkeeping are covered in template permit condition #1, however because the operating plan is site-specific, compliance with this permit condition does not assure compliance with the requirements of Section 60.113b.

If the control device used for this tank is a flare, section 60.115b requires additional monitoring and recordkeeping. See template permit conditions #24 and

#26. Any other requirements for flares must be addressed outside of this template.

District Rule 4623

District Rule 4623 has been submitted to the EPA to replace the old District Rule 463.2 which is SIP approved. Appendix B lists all of the applicable requirements of District Rule 4623 and shows which are included in the rule from the old SIP approved rule. This table shows that District Rule 4623 is as stringent as rule 463.2, thus rule 463.2 will subsumed by rule 4623 for the purposes of this template.

Section 2.0 states that this rule is only applicable to equipment used to store organic liquids, including crude oil and petroleum distillates, with a true vapor pressure of greater than 1.5 psia.

This rule requires that all tanks with a storage capacity greater than 19,800 gallons, storing organic liquids with a true vapor pressure greater than or equal to 1.5 psia, have either a floating roof or vapor recovery system to control volatile organic compound (VOC) emissions. Units covered by this template control VOC emissions by using a vapor recovery system.

Section 5.3.1 requires that any fixed roof tank with a storage capacity of 19,800 gallons or larger used to store any organic liquid, light crude oil or petroleum distillate with a true vapor pressure greater than 1.5 psia be equipped with a vapor loss prevention system capable of collecting all VOCs. These units also are required to contain a system for processing and for return to liquid storage or disposal of VOCs, so as to prevent their emission to the atmosphere at an efficiency of at least 95 percent by weight. See template permit conditions #2 and #3.

Section 5.3.2 requires that any tank gauging or sampling device on a tank vented to the vapor recovery system be equipped with a gas-tight cover.
This cover shall be closed at all times except during gauging or sampling.
See template permit condition #4.

Permit conditions will be added to include these work practice standards as well as the monitoring and recordkeeping requirements. See template permit conditions #18-21, and #23.

District Rule 2520, 9.5.2

Section 9.5.2 requires all records be maintained for at least five years. Template permit condition #25 requires that all records be maintained for at least five years.

V. Permit Shield

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Title V permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed. A permit shield is requested in template permit condition #28. The requirements of 40 CFR 60.113b(c) are site-specific and are only addressed by reference in this template. Therefore Section 60.113b(c) is not included in the permit shield for Subpart Kb.

A permit shield will also be granted for 40 CFR 60 Subpart K and Ka because facilities qualifying to use this template commenced construction, modification, or reconstruction after July 23, 1984. These rules only apply to units that commence construction, modification, or reconstruction before this date. A permit shield is granted from these requirements in template permit condition #29.

A permit shield will also be granted for District Rule 4661. The provisions of this rule are limited to organic solvents. Organic solvents are defined in this rule as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents. Tanks storing these liquids are excluded from this template in the template qualification form (see Appendix A). Therefore, this rule does not apply to units covered by this template. A permit shield is granted from this requirement in template permit condition #30.

A permit shield will also be granted for District Rule 4801. This rule specifies testing requirements for a stack source. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, this rule does not apply to units covered by this template. A permit shield is granted from this requirement in template permit condition #30.

VI. Permit Conditions

The following conditions will be incorporated into the Title V permit of any facility choosing to make use of template #SJV-TK-7-0:

1. Upon initial startup, the operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan

shall be retained for the life of the control equipment. [40 CFR 60.113b(c), 60.115b(c)]

2. Storage vessel shall be equipped with a closed vent system designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections. Emissions from the closed vent system in excess of this limit shall be considered a leak.[40 CFR 60.112b(a)(3)(i), District Rule 2520, 9.4.2]

3. Storage vessel shall be equipped with a control device designed and operated to reduce inlet VOC emissions by 95% or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f). [40 CFR 60.112b(a)(3)(ii), 40 CFR 60.113b(d)]

4. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2]

5. All piping, fittings, valves, and tank gauging or sampling devices shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2]

6. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than

10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)]

7. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2]

8. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2]

9. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2]

10. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2]

11. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2]

12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2]

13. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of

the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)]

14. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(ii)]

15. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879-83, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)]

16. For vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]

17. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling.
[40 CFR 60.116b(f)(1)]

18. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 °F true vapor pressure shall be determined by Reid vapor pressure at 100 °F and ARB approved calculations. [District Rule 4623, 6.2.2]

19. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30°, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3]

20. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4]

21. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432. [District Rule 4623, 6.2.5]

22. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)]

23. Operator shall keep a record of liquids stored in each container, storage temperature and the Reid vapor pressure of such liquids. [District Rule 4623, 6.1]

24. If the control device used for this tank is a flare, operator shall record all periods of operation during which the flare pilot flame is absent. [40 CFR 60.115b(d)(2)]

25. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2]

26. If the control device used for this tank is a flare, operator shall submit semiannual reports to the APCO of all periods recorded in which the pilot flame was absent. [40 CFR 60.115b(d)(3)]

27. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2]

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Kb (except 60.113b(c)) and SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2]

29. The requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

30. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

APPENDIX A

EPA COMMMENTS / DISTRICT RESPONCE
FOR
TEMPLATE # SJV-TK-7-0

EPA COMMENTS / DISTRICT RESPONSE

The EPA's comments regarding tank templates are encapsulated below followed by the District's response. A copy of the EPA's 12/3/96 letter is available at the District.

A. General Comments

1. EPA COMMENT

In all of the templates, the first paragraph should be revised to clarify that federally enforceable requirements in Title V permits will be enforceable not only by EPA and the public, but by the District as well.

DISTRICT RESPONSE

The first paragraph of the templates will be reworded as follows:

Units may be subject to "federally enforceable" requirements as well as requirements that are enforceable by the "District-only." Federally enforceable requirements will be enforceable by the EPA, the District, and the public through Title V permit conditions identified as federally enforceable. District-only requirements represent local or state regulations for which the EPA has no direct enforcement authority. The final Title V permits issued by the District will contain both federally enforceable and District-only requirements.

2. EPA COMMENT

In template Series 1 to 10, the second paragraph of the applicable requirements should be revised so as to be consistent with the language in the other templates.

DISTRICT RESPONSE

The second paragraph of these series will be revised to read as follows:

"District-only requirements are not addressed in this template except for those used in streamlining of multiple requirements. District-only requirements used in streamlining of multiple requirements will become federally enforceable. Table 1, Applicable Requirements, does not necessarily include all federally enforceable requirements that apply to tanks qualifying to use this template, and it is the source's responsibility to determine any and all applicable requirements to which the source is subject. Generally, requirements not addressed by this template are those that require a source-specific analysis, or are covered by other templates".

3. EPA COMMENT

Rule 4623 is the renumbered version of District Rule 463.2, which is the SIP-approved version of the rule. Permit conditions must be referenced to this SIP rule. In the analysis section of the template, the District may wish to explain that Rule 463.2 is the equivalent SIP-approved version of Rule 4623.

DISTRICT RESPONSE

The District will append a table to each template showing the rule numbers of the county SIP rules corresponding to the current District rules, and the permit conditions which show compliance with the provisions of those SIP rules. Also, in the compliance sections, it will be stated that Rule 4623 is a renumbering of the county SIP rules with no changes in requirements from those rules.

4. EPA COMMENT

The suggestion is made to include the various MACT standards that contain provisions for storage vessels in the list of Category "B" rules.

DISTRICT RESPONSE

Applicable MACT standards will be included in the list of Category "B" rules in current templates.

5. EPA COMMENT

Include the adoption date of rules included in the permit shield.

DISTRICT RESPONSE

Adoption dates of rules referenced in the templates will be included in the permit shields.

6. EPA COMMENT

Any sections of applicable requirements not addressed in the templates must be excluded from the permit shields.

DISTRICT RESPONSE

Affected sections will be excluded from the permit shields of these and all future templates.

7. EPA COMMENT

A general condition should be included in the permit conditions that states the definitions in the rules cited as the origin and authority for each permit condition.

DISTRICT RESPONSE

The District feels that the definitions in the rules are sufficient, as they were considered in previously approved templates. However, a condition will be added

to the umbrella template (SJV-UM-0-0) stating that all terms are used as defined in the cited underlying requirement unless otherwise explicitly defined within a particular permit condition.

8. EPA COMMENT

Either the templates or the Title V permit must include a requirement that reports of required monitoring be submitted at least every 6 months.

DISTRICT RESPONSE

Section 9.6.1 of District Rule 2520, as approved by EPA on 5/24/96, requires submittal of reports of any required monitoring at least every 6 months *unless a different frequency is required by an applicable requirement* (emphasis added). SJV-UM-0-0, the facility-wide template, includes a permit condition stating this requirement. Sources not using the facility-wide template will have this condition imposed in the Title V permit.

9. EPA COMMENT

The cite for the origin and authority of each permit condition should be specific to the provision (i.e. subsection) of the rule so it is clear what portion of the applicable requirement is being addressed.

DISTRICT RESPONSE

Cites have been revised to include applicable subsections of requirements.

10. EPA COMMENT

The Template Qualification Forms (TQFs) for all tank templates ranging from Series 4 through Series 18 should include a question asking whether the tank is equipped with a pressure relief valve, as required by SIP Rule 463.2, and disallowing those units not so equipped from using the template.

DISTRICT RESPONSE

The qualifier referenced above will be changed to read as follows:

"Is this a tank with a capacity of 84,000 gallons or less of a small producer (as defined in District Rule 4623) with a daily throughput of less than 6,300 gallons per day, and equipped with a pressure relief device set to within 10 percent of the maximum working pressure of the tank? If "no", continue to next question; otherwise STOP - you cannot use this template".

11. EPA COMMENT

The compliance certification language must include the following language to be consistent with be consistent with part 70 requirements:

"Based on information and belief formed after reasonable inquiry 1) the information on this form is true, accurate, and complete and 2) the facility is in compliance with this template's permit conditions."

DISTRICT RESPONSE
The templates will be submitted as part of a complete Title V application. The Title V application contains a Compliance Certification Form (TVFORM-005 in the SJVUAPCD Title V Permit Application Package). On the Compliance Certification Form the responsible official certifies the truth, accuracy, and completeness of the Title V application, including all supporting information.

12. EPA COMMENT
The TQF should provide information on the origin and authority of the qualification terms.

DISTRICT RESPONSE
Citations have been be added where missing or expanded as required.

13. EPA COMMENT
The District must be consistent with the underlying requirement when referring to capacity thresholds in the TQF.

DISTRICT RESPONSE
Such references have been reviewed and revised where necessary to achieve consistency with the language in the underlying requirement.

Series 7 Tanks

Permit Conditions

1. EPA COMMENT
In permit conditions 1 and 2, the District should specify more precisely the applicable subsections of 40 CFR 60. Subsections 112b(a)(3)(i) and (ii) should be cited as the origin and authority for these conditions.

DISTRICT RESPONSE
The cites have been revised to include applicable subsections.

2. EPA COMMENT
The District should clarify that a source must ensure compliance with Condition 1 as determined by the procedures in 40 CFR 60.485(b) for EPA Test Method 21. In addition, conditions 1 and 13 should be revised to reference authority to subsection 40 CFR 60.112b(a)(3)(i).

DISTRICT RESPONSE

A new condition (#6) has been added which states explicitly the requirements of 40 CFR 60.485(b) for EPA Test Method 21, and both conditions 1 and 13 will be revised to reference authority to subsection 40 CFR 60.112(a)(3)(i).

3. EPA COMMENT

The template should address the requirements of Subpart Kb for the use of flares as control devices, as specified in 40 CFR 60.112b(a)(3)(ii) and 60.113b(d), that such flares must meet the requirements of 40 CFR 60.18.

DISTRICT RESPONSE

A section discussing the requirements from Subpart Kb pertaining to flares has been added to the compliance section of the template, and permit condition #3 (formerly #2) has been modified to address compliance with these requirements. Condition #3 now reads as follows:

Storage vessel shall be equipped with a control device designed and operated to reduce inlet VOC emissions by 95% or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18. The operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 40 CFR 60.112b(a)(3) or 40 CFR 60.112b(b)(1) shall meet the requirements as specified in the general control device requirements of 40 CFR 60.18(e) and (f).

4. EPA COMMENT

The template must address Subpart Kb requirements for control devices other than flares, as specified in 40 CFR 60.114b(c) and 60.115b(c).

DISTRICT RESPONSE

A section discussing the requirements from Subpart Kb pertaining to control devices other than flares has been added to the compliance section of the template, and permit condition #1 has been added to address compliance with these requirements as well as startup requirements. Condition #1 now reads as follows:

Upon initial startup, the operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment.

5. EPA COMMENT

The template must contain a compliance method for the 95% control efficiency requirement. Subpart Kb requires that affected sources have an operating plan approved by EPA, and that the sources operate and monitor the closed vent system and control device in accordance with the plan. A condition should be added to that effect, however since the plan is site-specific, compliance with it cannot be assured by compliance with the template permit conditions. A permit shield cannot be provided for those sections of the subpart.

DISTRICT RESPONSE

See #24. A condition has been added to require that the source submit an operating plan upon startup the per section 60.113b(c), and that the vapor control system be operated in accordance with the provisions of the operating plan. The condition reads as follows:

Upon initial startup, the operator shall submit to the APCO an operating plan as described in 40 CFR 60.113b(c) and shall operate the closed vent system and monitor the parameters of the system in accordance with the approved operating plan. The operator shall keep a record of the measured values of the parameters monitored in accordance with the approved operating plan. The operating plan shall be retained for the life of the control equipment.

Section 60.113b(c) will not be included in the permit shield because of the site-specific nature of the operating plan.

6. EPA COMMENT

The opening paragraph of section 60.115b requires that the records needed for subsection 60.115b(c)(i.e., a copy of the operating plan for a closed vent system and control device other than a flare) be kept for the life of the control equipment, not five years, as stated in the template.

DISTRICT RESPONSE

This requirement has been added to condition #1, which requires submittal of the operating plan.

7. EPA COMMENT

Condition 5 should state "unless the APCO <u>or the Administrator</u> specifically requests".

DISTRICT RESPONSE

The District was given authority to implement and enforce Subpart Ka, the origin and authority for this condition, in a letter dated June 22, 1993 from EPA to Michael Scheible of the California Air Resources Board. There is no provision in this subpart prohibiting EPA from delegating to the states any authority therein.

Therefore the District feels that it has the authority to act as the Administrator. Consequently the condition will not be changed.

8. EPA COMMENT

Under condition 6, the threshold above which the true vapor pressure of each type of crude oil must be determined and recorded is 0.5 psi rather than 1.0 psia as currently stated in the template.

DISTRICT RESPONSE

The condition has been changed accordingly.

9. EPA COMMENT

Because section 60.117b (b) does not allow EPA to delegate authority for the approval of alternative test methods in subsection 60.116b(e)(3)(iii) and (iv), the District must revise condition 7 to stipulate that the use of an alternative method to calculating the true vapor pressure (other than ASTM Method D2879-83) must be approved by the Administrator.

DISTRICT RESPONSE

The condition will be changed to read "...approved by the EPA."

10. EPA COMMENT

The template must address the requirements of 40 CFR 60.116b(e)(1).

DISTRICT RESPONSE

The following condition has been added to the template conditions:

For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)]

11. EPA COMMENT

Conditions 3 and 4 must specify, pursuant to the definitions in Rule 463.2, that "gas-tight" means emissions less than or equal to 10,000 ppm as methane measured at a district of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21.

DISTRICT RESPONSE

A definition of the term "gas-tight" per Rule 4623 has been added to all affected templates

12. EPA COMMENT

In addition to specifying Method 21 as the method for determining VOC leaks (condition 13), the template must explicitly state the required calibration procedure as set forth in 60.485(b)(1)(i) and (ii). Condition 21 should clarify that this is a means for determining compliance with the 500 ppm limit imposed on the closed vent system.

DISTRICT RESPONSE

Condition #21 has been deleted and replaced by condition #6 as follows:

Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases:

A. Zero air (less than 10 ppm of hydrocarbon in air); and

B. A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane [40 CFR 60.112b(a)(3)(i)]

Since no monitoring requirement is included in Rule 4623, (SIP Rule 463.2), the method above is being used as the test method for determining compliance with Rule 4623 requirements for gas-tightness as well as the 500 ppm limit from subpart Kb..

APPENDIX B

463.2 SIP DISTRICT RULE / 4623 DISTRICT RULE COMPARISON FOR TEMPLATE # SJV-TK-7-0

Template SJV-TK-7-0

	4623 SJVUAPCD	463.2 old SIP Rule
EXEMPTIIONS		
The requirements of this rule shall not apply to ;		
For any tank designated for emergency standby, in existence prior to May 1, 1979, and which stores exclusively petroleum distillate or crude oil. Prior to return to emergency standby status, each tank shall be thoroughly drained. Each use of the tank shall not exceed 30 days. After a tank has been used (filled or partially filled) and draining of the tank has begun, any further filling of the tank shall constitute a separate use of the tank. The tank shall be equipped with a pressure relief device set to within ten (10) percent of the maximum allowable working pressure of the tank.	X	X
If the unit is a tank with a capacity of less than 84,000 gallons or less of a small producer with a daily throughput of less than 6,300 gallons per day, and equipped with a pressure relief device set to within 10 percent of the maximum allowable working pressure of the tank.	X	X
Temporary tanks, with capacities of 21,000 gallons or less, left on site for six months or less.	X	X
Tanks, reservoirs or other containers which are pressure vessels maintaining working pressures sufficient at all times to prevent organic liquid loss or VOC loss to the atmosphere.	X	X
If a new incineration device is required solely to comply with the requirements of this rule for existing tanks such device shall not be subject to the requirements of the New and Modified Stationary Source Review Rule provided the device includes BACT provisions for all air contaminants and the device is under District permit.	X	X
REQUIREMENTS		
Liquid stored has a TVP of 11 psia or greater under storage conditions	X	X
No person shall place, store or hold in any floating roof tank of 19,800 gallons or greater, any organic liquid unless such tank, is equipped with; 1) a floating roof consisting o a pontoon-type or double-deck-type cover, 2) a closure device between the tank shell and roof edge consisting of two seals.	X	X
Seal designs shall be submitted to the APCO and shall not be installed or used unless they are approved by the APCO as meeting the criteria set forth in the following.	X	X
Metallic-shoe-type, welded tanks;		
No gap between the tank and primary seal shall not exceed 1 1/2 inches. The cumulative length of all gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of tank circumference. No continuous gap greater than 1/8 inch shall exceed 10% of the tank circumference.	X	X
No gap in the secondary seal shall exceed 1/2 inch. The cumulative length of all gaps greater than 1/8 inch shall not exceed 5% of the tank circumference.	X	X

If the primary seal is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface.	X	X
If the primary seal is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface.	X	X
The secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal.	X	X
Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal.	X	X
Metallic-shoe-type seal, riveted tank; No gap between the tank and primary seal shall not exceed 2 1/2 inches. The cumulative length of all gaps greater than1 1/2 inch shall not exceed 10% of the circumference of the tank. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of tank circumference. No continuous gap greater than 1/8 inch shall exceed 10% of the tank circumference.	X	X
No gap in the secondary seal shall exceed 1/2 inch. The cumulative length of all gaps greater than 1/8 inch shall not exceed 5% of the tank circumference.	X	X
If the primary seal is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. If the primary seal is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid surface.	X	X
There shall be no holes or tears in, or openings in the envelope surroundings the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.	X	X
The secondary seal shall allow easy insertion of probes up to one and one-half (2-1/2) inches in width in order to measure gaps in the primary seal.	X	X
Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal.	X	X
Resilient toroid type seal; No gap between the tank and primary seal shall not exceed 1/2 inches. The cumulative length of all gaps greater than1/8 inch shall not exceed 30% of the circumference of the tank. No continuous gap greater than 1/8 inch shall exceed 10% of the tank circumference	X	X

No gap in the secondary seal shall exceed 1/2 inch. The cumulative length of all gaps greater than 1/8 inch shall not exceed 5% of the tank	X	X

circumference.		
There shall be no holes or tears in, or openings in the envelope surroundings the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.	X	X
The secondary seal shall allow easy insertion of probes up to one and one-half (1/2) inches in width in order to measure gaps in the primary seal.	X	X
Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal.	X	X
The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of 8 locations shall be made available; in other cases a minimum of 4 locations shall be made available. If the APCO suspects a violation may exist the APCO may be necessary to determine the seal condition for its entire circumference.	X	X
All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal , or lid. The cover, seal, or lid shall at all times be in a closed position, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak.	X	X
Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.	X	X
<u>Fixed roof tanks with internal floating roof</u> Liquid stored has a TVP of 11 psia or greater under storage conditions	X	X
No person shall place, store or hold in any floating roof tank of 19,800 gallons or greater, any organic liquid, light crude oil or petroleum distillate unless the internal floating roof is equipped with; 1) a floating roof consisting o a pontoon-type or double-deck-type cover, 2) a closure device between the tank shell and roof edge consisting of two seals.	X	X
<u>Fixed roof tanks with vapor recovery system</u> No person shall place, store or hold in any floating roof tank of 19,800 gallons or greater, any organic liquid, light crude oil or petroleum distillate unless the tank is equipped with a vapor loss prevention system, consisting of a system capable of collecting all VOC's, and a system for processing and for return to the storage or disposal of VOC's, so as to prevent their emission to the atmosphere at an efficiency of at least 95% by weight.	X	X

Any tank gauging or sampling device an a tank vented to the vapor recovery shall have gas-tight covers and closed at all times except during gauging or sampling.	X	X
All piping, valves and fittings shall be in a gas-tight conditions.	X	X
Storage in any above-ground tank of 19,800 gallons or less of gasoline unless		

tank is equipped with a pressure relief device set to within 10% of the maximum allowable working pressure of the container or is equipped with a vapor loss control device which complies with the requirements of the above rules.	X	X
TEST METHODS		
True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100°F true vapor pressure shall be determined by Reid vapor pressure at 100°F and ARB approved calculations.	X	X
True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30°, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990.	X	X
Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device.	X	X
The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422.	X	X
RECORDKEEPING		
Keep an accurate record of liquids stored in each container, storage temperature of the Reid vapor pressure of such liquids.	X	X
Emergency standby tanks are exempt from the requirements of the requirements of the rule for floating roof tanks. Records shall be maintained as required by the rule and the date(s) liquid is first introduced to each tank and date(s) tank is fully drained. Such records shall be submitted to the APCO 60 days prior to permit renewal.	X	X
for tanks exempt to this rule the owner shall maintain monthly records of average daily throughout and shall submit such information to the APCO 30 day prior to annual permit renewal.	X	X

APPENDIX C

TEMPLATE QUALIFICATION FORM
FOR
TEMPLATE # SJV-TK-7-0

Title V General Permit Template Qualification Form

District Permit # _____

Please answer the questions in the table below. A fixed roof tank (unit) which meets the criteria of this table is qualified to use this template as part of a Title V application. To use this template, remove this sheet and attach to application.

Yes	No	Description of Qualifying Units
		Is this unit a fixed roof tank with a vapor recovery system used for the storage of volatile organic liquids? [40 CFR 60.112b(a)(1)] If "yes", continue to next question; otherwise STOP - you cannot use this template.
		Does this unit have a storage capacity greater than or equal to 40 m^3 (10,567 gallons)? [40 CFR 60.110b(a)] If "yes", continue to next question; otherwise STOP - you cannot use this template
		Has construction, modification, or reconstruction commenced on this unit after July 23, 1984? [40 CFR 60.110b(a)] If "yes", continue to next question; otherwise STOP - you cannot use this template
		Does this unit store organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents? [District Rule 4661, 4.1] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit a pressure vessel designed to operate in excess of 204.9 kPa (29.7 psi) and without emissions to the atmosphere? [40 CFR 60.110b(d)(2)] If "no" continue to next question; otherwise STOP - you cannot use this template
		Is this unit a vessel permanently attached to a vehicle such as a truck, rail car, barge, or ship? [40 CFR 60.110b(d)(3)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit a vessel with a design capacity less than or equal to 1589.874 m^3 (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer? [40 CFR 60.110a(b)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit located at a heavy oil test station in Kern County? [District Rule 4404] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit a vessel located at a bulk gasoline plant? [40 CFR 60.110b(d)(5)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit a storage vessel located at gasoline service stations? [40 CFR 60.110b(d)(6)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit a vessel used to store beverage alcohol? [40 CFR 60.110b(d)(7)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this a tank with a capacity of 84,000 gallons or less of a small producer (see District Rule 4623) with a daily throughput of less than 6,300 gallons per day, and equipped with a pressure relief device set to within 10 percent of the maximum working pressure of the tank? If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit an emergency standby tank, storage not exceeding 30 days at a time, in existence prior to May 1, 1979, which store exclusively petroleum distillates or crude oil? [District Rule 4623, 4.2.1] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit a vessel at a coke oven by-product plant? [40 CFR 60.110b(d)(1)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Does this unit have a true vapor pressure greater than 1.5 psia? [District Rule 4623, 2.0] If "no", STOP - you cannot use this template; otherwise you qualify to use this template.

Based on information and belief formed after reasonable inquiry 1) the information on this form is true and correct and 2) the facility certifies compliance with this template's permit conditions:

_____ _____

Signature of Responsible Official Date

_____

Name of Responsible Official (Please Print)